ANALYZING MEASURES OF CENTRAL TENDENCY

Values that describe the center of a data set
a) mean  b) median  c) mode

**Mean** - the average of a group of numbers divided by how many numbers there are

\[67,84,31,68,65,60,63\]
\[
\text{sum } = 438
\]
\[
\text{mean (average) } = \frac{438}{7} \approx 62.57
\]

**Median** - the middle number in a group of numbers when they are arranged in order

\[31,60,63,65,67,68,84\]

If there is an even number of data values, the median is the average of the middle two numbers

\[41,43,43,48,50,52\]

The median is the average of 43 and 48 or **45.5**

**Mode** - the set of numbers that occur the most

\[61,84,72,63,91,68,63,72,63,84,63\]

Then mode is 63

**Note** it is possible to have more than one mode

\[91,84,72,63,91,68,63,72,63,84,91\]

The mode is 63 and 91

**Note** it is possible to have no mode

\[31,60,63,65,67,68,84\]

**Outlier** - a data value that is much greater or much less than the other values

\[31,60,63,65,67,68,84\]

31 and 84 are outliers